

**VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
SOUTH CENTRAL REGIONAL OFFICE**

**FACT SHEET
FOR PROPOSED PERMITTING ACTION
UNDER 9 VAC 5 Chapter 80 Article 1 (TITLE V-CLEAN AIR ACT)**

APPLICANT:

VA-30200
Solite, LLC
P. O. Box 68
Arvonnia, VA 23004

AIRS ID 51-029-00005

FACILITY LOCATION:

State Route 652, 1 mile west of Route 15 north of Arvonnia
UTM Coordinates are ZONE: 17 EASTING: 735 km NORTHING: 4176.6 km

BACKGROUND AND PROPOSED PERMITTING ACTION:

Solite, LLC (Solite) is a lightweight aggregate manufacturing operation, covered by SIC Codes 3295 and 4953. Giant Resource Recovery, Inc. (GRR) is a hazardous waste fuel provider located adjacent to Solite. For Title V purposes, the two plants are considered to be a single stationary source; however, the Title V permit has been divided into separate portions based on daily responsibilities of each plant. This permit action affects only the Solite portion of the permit.

A Title V permit was issued to Solite Corporation on December 3, 2001. On July 19, 2005, the permit was administratively amended due to a change in ownership (Solite Corporation was sold to Solite LLC). Both the original permit and the (July 19, 2005) amendment incorporated by reference the provisions of 40 CFR 63 Subpart EEE (Hazardous Waste Combustion MACT). Because the compliance date for Subpart EEE was after initial Title V permit issuance, the compliance demonstration for Subpart EEE was not complete when the Title V permit was developed. The MACT requires that operating parameters be established based on testing of units, but the operating parameters to show MACT compliance had not been established and therefore could not be included in the original Title V permit. Therefore, the permit included a requirement that within 6 months of submitting their compliance demonstration under the MACT, Solite would submit an application to incorporate substantive requirements of 40 CFR 63 Subpart EEE into their Title V permit.

The required application to incorporate substantive requirements was submitted on March 30, 2004, with supplemental information submitted on June 18, 2004, October 27, 2004, October 29, 2004, January 31, 2005, and June 17, 2005. This permitting action is to incorporate operating parameters based on those submittals as well as Solite's Notification

of Compliance (NOC), which was submitted on May 11, 2004 (and revised on January 31, 2005).

This permitting action is considered a significant modification to the Title V permit for the following reasons:

- to provide for public review and input when establishing initial monitoring requirements
- because this is the first Title V review opportunity based on actual (vs. anticipated) operating parameters
- due to complexity of the initial compliance demonstration and associated NOC.

Processing the permit application as a significant modification is consistent with guidance provided by EPA in the preamble to the September 30, 1999 Phase I HWC NESHAP rule, and in the NOC/Title 5 Interface guidance published by EPA in August 2002.

In accordance with 40 CFR 70.7(e)(2)(v), Solite is required to operate as specified in their most recently submitted NOC. Therefore, if there are any discrepancies between what is required in the Title V permit and what is included in the NOC, Solite is at risk of being in violation of either the MACT standard or the Title V permit. To address this concern, EPA anticipated that only the initial NOC would be incorporated into a Title V permit using the significant modification procedures. It is anticipated that any subsequent NOC submittals can be incorporated using procedures for minor permit revisions. Solite may submit the Title V modification request together with any subsequent NOC submittals. Since changes subject to minor modification procedures may be made at the time the application is submitted (9 VAC 5-80-210 F), if this procedure is followed Solite will be able to operate in compliance with their most recent NOC (as required by the MACT) even though the Title V permit has yet to be changed. Condition X.A.5. of this permit has been included to ensure this procedure is followed.

SUMMARY OF PERMIT CHANGES:

Changes to incorporate MACT provisions are contained in Section X, Attachment A, and Attachment B of the permit. Specifically, the following changes have been made:

- Condition X.A.5. requires operation in accordance with the NOC and contains requirements for incorporating any NOC changes into the Title V permit.
- Condition X.B. requires monitoring in accordance with the NOC, as summarized in Attachments A and B.
- Attachment A contains specific operating parameters for each kiln
- Attachment B contains MACT standards of performance and provides linkage to the operating parameters used to demonstrate compliance with each standard.

In addition to the changes made to incorporate MACT provisions, the following changes are included in this permit action:

- Kiln #5 has been removed from the operating permit. This is consistent with the Notification of Compliance which provides documentation only for Kilns 6-8.
- Heading for Section V of the permit was changed to clarify that these conditions apply to unit RB10 (24" bypass belt conveyor) as well as SU4 (storage bin).

COMPLIANCE STATUS:

The source was last inspected on September 26, 2003, and was found to be in compliance. The required annual emission statement and certification were submitted by Solite on April 15, 2005. The NOC was submitted on May 10, 2004 with a revision submitted February 1, 2005. NOC approval has not been granted; DEQ is awaiting receipt of compliance schedules for installation of mid-kiln temperature and CO monitoring equipment.

TITLE V PROGRAM APPLICABILITY BASIS:

There is no change in Title V applicability since the Title V permit was issued on December 3, 2001. Solite remains a Title V major source for SO₂, NO_x, PM, chlorine, hydrochloric acid, and total HAPs.

PERIODIC MONITORING:

Kilns

Applicable monitoring requirements under the Hazardous Waste Combustion (HWC) MACT, 40 CFR 63, Subpart EEE, are contained in Section X of the permit. The MACT requires continuous monitoring for CO or hydrocarbon (in conjunction with monitoring for oxygen), and contains a future monitoring requirement for particulate matter, once performance specifications and operational requirements applicable to PM CEMS are promulgated. MACT requirements also include continuous monitoring of numerous operating parameters, including but not limited to: combustion chamber temperature, combustion gas exit temperature, baghouse inlet temperature, flue gas flow rate, hazardous waste feedrate, feedrate of semivolatile and low volatile metals, feedrate of total chlorine and chloride, and pressure drop across each baghouse cell.

The notification of intent to comply (NIC) with Subpart EEE was submitted on October 2, 2000, as required. Because the NIC satisfied the requirements of 40 CFR 63.1212, that section of the Subpart is not included in the permit.

Section III of the permit contains monitoring requirements to demonstrate compliance with state regulations. These limits are separate from the MACT limits and were not streamlined from the permit. Although in some cases the limit in Section X of the permit (based on the MACT) may appear more stringent than the limit in Section III (state regulations), it is reasonable to keep both sets of limits in the permit. Monitoring requirements in Section X

are established based on performance testing and are therefore subject to change if future testing supports a change in the operating limits. Monitoring requirements in Section III (State Regulations) are fixed by the Regulations and are not anticipated to change. There is a state limitation on fuel sulfur content, opacity, and particulate emissions from the kilns. Periodic monitoring requirements for opacity from the kilns are based on observation of the presence or absence of visible emissions. In the event visible emissions are observed, corrective action is required. If corrective actions do not result in the absence of visible emissions, VEE's are required to demonstrate compliance with the applicable opacity limit.

Opacity monitoring is deemed sufficient for demonstrating compliance with state regulations for these units since absence of visible emissions from a fabric filter is an indication that the control system is operating as designed. Furthermore, expected particulate emissions (based on a reasonable grain loading from the fabric filters) are well below emission limits established by state regulations.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emission units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
- b. Any term or condition of any preconstruction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under . 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under . 112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either . 504(b) or . 114(a)(3) of the federal Clean Air Act or these regulations.

- f. Any standard or other requirement for consumer and commercial products under . 183(e) of the federal Clean Air Act.
- g. Any standard or other requirement for tank vessels under . 183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.
- j. With regard to temporary sources subject to 9 VAC 5-80-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under . 129 of the Clean Air Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5 Chapter 80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the state but is not federally-enforceable is identified in the draft Title V permit as such.

REQUEST FOR VARIANCES OR ALTERNATIVES:

None

PUBLIC HEARING AND COMMENT PERIOD:

Significant modifications to Title V permits are subject to a public comment period of at least 30 days. Additionally, EPA and affected states are afforded the same review opportunities as for initial permit issuance.

During the public comment period any interested person may submit written comments on the draft permit. All written comments should be addressed to the following individual and office:

Margaret Key
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Department of Environmental Quality
South Central Regional Office
7705 Timberlake Road
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